Removing barriers to flow and wildlife movement makes salt marshes more resilient

Photo: Andrew Borsari

What are barriers in a salt marsh?

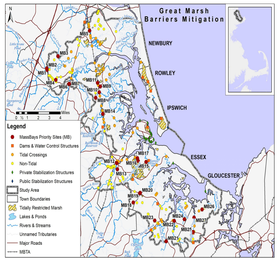
Barriers are human made structures that restrict water flow, movement of sediments, and tides. They include **dams**, **coastal stabilization** structures, and stream and tidal crossings where **roads, bridges, and culverts** are built.

The interruption of important physical, chemical, and ecological processes caused by these barriers can eliminate entire species, and reduce the overall resilience of coastal watersheds, making communities more vulnerable to extreme weather events.

Many of the barriers are getting old

As the region has become more developed, more pipes, roadways, and other barriers have intersected with waterways and coastlines. Many of these barriers have aged past their design life and are in need of replacement or removal, while others were never designed to allow wildlife passage or to manage high flows associated with extreme weather.

Great Marsh Barriers Assessment



The Ipswich River Watershed Association inventoried and assessed **1,026 potential barriers** across **280 square miles** on the North Shore, throughout the Parker, Ipswich and Essex Rivers (PIE-Rivers) watersheds. The PIE-Rivers watersheds are the principal contributing watersheds to the Great Marsh.

The barriers were prioritized for both ecological impact and infrastructure risk, and the results shared with local towns. We've identified opportunities for projects that will achieve dual benefits with respect to community resilience and ecological integrity.

The **Great Marsh** is New England's largest salt marsh

Why it Matters

Extreme weather events, like Hurricane Sandy, are becoming more frequent. Removing barriers helps the whole system work better, because healthy, connected ecosystems are more resilient to storm damage and flooding.

What You Can Do

Find out what local communities in the contributing watersheds are doing to remove barriers to flow.

pie-rivers.org

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The Voice of the River

Scan to see our report, and more about PIE-Rivers

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